



Image 1731

**PATENT**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF APPEALS AND INTERFERENCES  
DN A01157

In re application of

Barrett Richard Bobsein, et al..

Paper No.: 16

Serial No. 09/774,064

Group Art Unit: 1731

Filed: January 31, 2001

Examiner: P. Chin

For: WATERBORNE PAPER OR PAPERBOARD COATING COMPOSITION

**REPLY TO EXAMINER'S ANSWER**

Commissioner for Patents

Box 1450

Alexandria, VA 22313-1450

Sir:

This is in response to the Examiner's Answer in the above identified application mailed on August 27, 2003.

DN A01157



CERTIFICATE OF MAILING

I hereby certify that the following correspondence is being deposited as first class mail with the United States Postal Service in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated next to my signature below.

Reply to Examiner's Answer

DATE: *Oct. 24, 2003* SIGNATURE: *Monica D. Schuler*

## RESPONSE

### 35 USC 102(b) REJECTION OF CLAIMS 1 AND 3 OVER HOSHINO

The examiner has rejected claims 1 and 3 under 35 USC 102(b) as anticipated by Hoshino because Hoshino discloses a mixture of inorganic pigment such as  $\text{CaCO}_3$  and hollow emulsion polymer particles having a bimodal size distribution. In his response to appellants' brief the examiner argues that (Section (11), point 1.) "The fact remains that the claimed range of polymer particles fall within the ambit of the preferred range in Hoshino as noted in the above rejection." Appellants respectfully submit that this in itself does not represent a anticipating disclosure of their invention as claimed. Hoshino in fact discloses [0017] that "the amount in which the above-described emulsion particles are used, while not subject to any particular limitation as long as it is at least 1 wt% of the entire pigment amount, is preferably 2 to 70 wt%, and ideally 3 to 30 wt%. ....during the mixing of the aforementioned binders, inorganic pigments, and emulsion particles.". Appellants maintain that Hoshino's disclosure of hollow polymer particles is nowhere coupled with the use of a conjugate amount of pigment which is from 50% to 100% calcium carbonate, by weight of the pigment. In Hoshino's only explicit paper coating composition [0029], the pigment contains 27 wt% calcium carbonate (on Hoshino's basis). Appellants respectfully submit that the disclosure of Hoshino is not to compositions including from 50% to 100% calcium carbonate, by weight of the pigment, as claimed by appellants. Since Hoshino does not disclose this element of appellants' claims 1 and 3, nor is it inherent in Hoshino's disclosure, Hoshino fails to disclose each and every element of appellants' claim. Appellants therefore, respectfully assert that their claims 1 and 3 are not anticipated by Hoshino under 35 USC 102(b).

### 35 USC 103(a) REJECTION OF CLAIMS 1 AND 3 OVER HOSHINO

The examiner has rejected claims 1 and 3 under 35 USC 103(a) as obvious over Hoshino because Hoshino discloses a mixture of inorganic pigment such as CaCO<sub>3</sub> and hollow emulsion polymer particles having a bimodal size distribution. As the examiner points out, Hoshino's disclosed ranges of the amount of polymer particles relative to pigment, the diameter of the larger (hollow) particles and the diameter of the smaller particles exhibit overlap but do not coincide with the selected ranges as claimed by appellants. Hoshino does not teach or suggest a waterborne pigmented paper or paperboard coating composition in which the pigment includes 50% to 100% calcium carbonate, by weight based on pigment weight, as claimed by appellants. Appellants respectfully maintain that the examiner has not met his burden in establishing a *prima facie* case of obviousness because he has not pointed to any disclosure within Hoshino which indicates a realization of the problem faced by appellants, much less its solution, or which would motivate one skilled in the art to form appellants' composition and achieve the unexpected advantages of increased gloss or brightness thereby.

In fact Hoshino's examples provide no teaching or suggestion of increased gloss or brightness through the use of his bimodal system in his relatively low carbonate compositions. In Table 2 (Hoshino's [0031] on page 12 of the translation provided) Hoshino's Comparative Example 1 (a unimodal polymer) exhibits substantially the same white paper gloss and print gloss as each of the Working Examples 1-5. And Hoshino's Comparative Example 2 (a unimodal polymer) exhibits substantially the same white paper gloss and print gloss as Working Example 5, to which it is closely related. The same trends are found for Hoshino's degree of whiteness. The fair teaching of Hoshino, appellants submit, is that his invention offers no suggestion of enhanced gloss or whiteness, thereby providing no motivation *per se* to modify his composition or his pigmentation to afford a gloss or brightness increase. Appellants' invention (Specification, page 2,

lines 9-16), on the other hand, is particularly directed to high calcium carbonate level coating compositions having higher sheet gloss as well as other advantages including increased brightness. Appellants respectfully submit that Hoshino, taken as a whole, does not teach or suggest their invention and that their claims 1 and 3, therefore, are not obvious under 35 USC 103(a) over Hoshino.

Respectfully Submitted,

A handwritten signature in cursive script, appearing to read "Ronald D. Bakule".

Ronald D. Bakule

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Date: October 24, 2003